



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,954	03/28/2000	Juliusz W. Adamczuk	00938	7643

7590 05/21/2003

JAMES G. O'NEILL  
KLEIN, O'NEILL & SINGH  
2 PARK PLAZA SUITE 510  
IRVINE, CA 92614

EXAMINER

NGUYEN, SANG H

ART UNIT PAPER NUMBER

2877

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/537,954	Applicant(s) ADAMCZUK, JULIUSZ W.	
	Examiner Sang H Nguyen	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2000.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-11, 13-17 and 19 is/are rejected.
- 7) ☒ Claim(s) 7, 12 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2877

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ors et al (U.S. Patent No. 4,651,011) in view of Sullivan (U.S. Patent No. 4,971,895).

Regarding claims 1-4 and 13; Ors et al. discloses a non destructive method for surface inspection and profiling a material, comprising the step of:

- \* selecting an area of the material of a substrate (2 of figure 1) to be tested;
- \* selecting a polymer mixtures considered to be a cure polymer film (1 of figure 1);
- \* applying the selected polymer mixture (1 of figure 1) to surface on selected area of the material of the substrate (2 of figure 1);
- \* allowing the selected polymer mixture to polymerized on the surface (col.3 lines 30-38, col.4 lines 15-42 and table 1). See figures 1-5.

Ors et al teaches all of features in claimed invention except for lifting the polymerized polymer mixture from the surface and processing the polymerized polymer mixture lifted from the surface to create usable information of surface of the material. However, Sullivan teaches that

Art Unit: 2877

it is known in the art to provide lifting or moving the polymerized polymer mixture substrate (52P of figure 5) by a conveyor belt (54 of figure 5) to a inspection (59 of figure 5); and processing the polymerized polymer mixture substrate (52P of figure 5) to create usable information of surface of the material by the inspection (59 of figure 5). See figures 1-5.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify non destructive method for surface inspection and profiling a material of Ors et al with lifting the polymerized polymer mixture from the surface and processing the polymerized polymer mixture lifted from the surface to create usable information of surface of the material as shown in method of Sullivan for the purpose of improving material on the substrate and high resolution processing polymerized of polymer to printed wiring boards.

3. Claims 5-6, 8-11, 14-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ors et al and Sullivan as applied to claims 1-4 and 13 above, and further in view of Dronzek, Jr, (WO 93/09925).

Regarding claims 5-6, 8-11, 14-17, and 19; Ors et al discloses all of features in claimed invention except for the polymer mixture from the family of vinyl copolymers. However, Dronzek, Jr. teaches that it is known in the art to provide the polymer mixture from the family of vinyl copolymers (page 14 in lines 22-24). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify non destructive method for surface inspection and profiling a material of Ors et al with the polymer mixture from the family of vinyl

Art Unit: 2877

copolymers as shown in the method of Dronzek Jr. for the purpose of applying the adhesive coating to substrate and producing a patterned visual image.

*Allowable Subject Matter*

4. Claims 7, 12, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art cited on attached form PTO-892 is the most relevant prior art known. However, Applicant's claimed invention distinguishes over the prior art for the following reasons. The claims are allowable over the prior art of record, taken alone or in combination, disclose or render obvious a method for non-destructive surface inspection and profiling of a surface of a material comprising all the specific elements with the specific combination including the step of processing the image of the mold of the surface in a computer to selectively obtain depth of any surface pitting, measure areas of any surface pitting, measure distance between points of interest on the image, calculate theoretical loss of mass of the surface, and to calculate the percentage of differences between an ideal surface and the tested surface as set forth in claims 7, 12, and 18.

5. Claim 20 is allowed.

The following is an examiner's statement of reasons for allowance: The cited art does not teach or suggest all the steps in independent claim 20. Especially, The prior art does not teach or

Art Unit: 2877

render obvious the combination of applicant's recited a method for non-destructive surface inspection and profiling of a surface of a material comprising all the specific elements with the specific combination including of selecting a polymer mixture from a vinyl copolymer mixed with from 0.1 % to 4 % by mass of a selected dye or pigment color, in combination with the rest of the limitations of claim 20.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nagasaki et al (6,278,797) discloses apparatus for inspecting land attached circuit board; Chisholm et al (6,091,491) discloses optical fingerprinting of plastics compositions; Dronzek, Jr. discloses process for the production of in line gravure printed in mold labeled blow molded containers; Adachi et al (5,278,451) discloses semiconductor device sealed with mold resin; Hill, Jr. discloses optical inspection of polymer based materials; or Taylor et al (4,670,528) discloses polymeric pyridinium ylides and products prepared from same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Sang Nguyen whose telephone number (703)308-6426. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Frank Font, can be reached on (703)308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722 or 7724.

Application/Control Number: 09/537,954

Page 6


Art Unit: 2877

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

8N

Nguyen/ sn

May 8, 2002

  
Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2877  
Technology Center 2800